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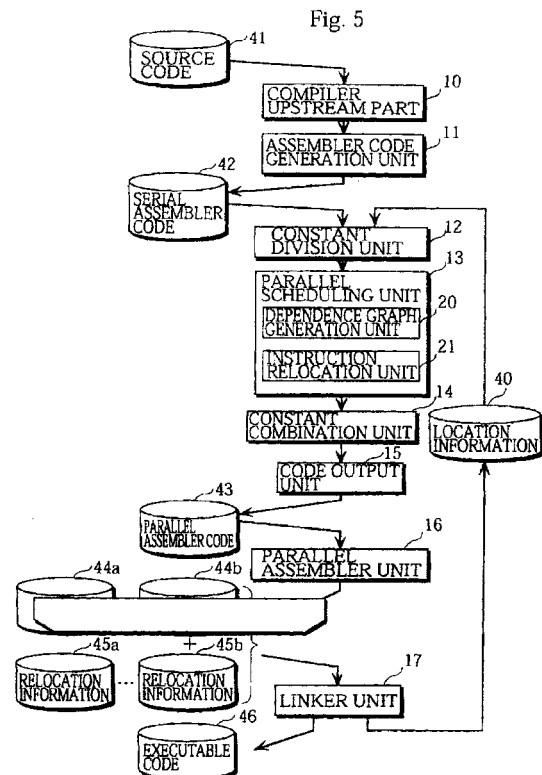
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(54) Program conversion apparatus for constant reconstructing VLIW processor

(57) A program conversion apparatus includes: the constant division unit 12 for specifying instructions in the serial assembler code 42 that use large constants which cannot be arranged within the operation fields of object VLIWs and for dividing the specified instructions into divided constant use instructions for storing pieces of the large constants into the specialized constant buffer 107 of a VLIW processor and divided constant use instructions for performing operations using the stored constants; the dependence graph generation unit 20 for generating a dependence graph based on the execution order of each instruction in the serial assembler code 42 after the division process by the constant division unit 12; and the instruction relocation unit 21 for relocating the instructions according to the dependence graph to generate parallel assembler code.





European Patent  
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EUROPEAN SEARCH REPORT

Application Number  
EP 98 30 6914

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.6)
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A	CONTE ET AL: "Instruction fetch mechanisms for VLIW architectures with compressed encodings" PROCEEDINGS OF THE 29TH. ANNUAL IEEE/ACM INTERNATIONAL SYMPOSIUM ON MICROARCHITECTURE. MICRO-29. PARIS, DEC. 2 - 4, 1996, PROCEEDINGS OF THE ANNUAL IEEE/ACM INTERNATIONAL SYMPOSIUM ON MICROARCHITECTURE. (MICRO), LOS ALAMITOS, IEEE COMP. SOC. PRESS, U, vol. SYMP. 29, 2 December 1996 (1996-12-02), pages 201-211, XP010206097 ISBN: 0-8186-7641-8 * the whole document * ---	1, 19, 29, 31-33	
P, A	US 5 787 302 A (ANG MICHAEL ET AL) 28 July 1998 (1998-07-28) * abstract * * column 2, line 12 - line 30 * ---	1, 19, 29, 31-33	TECHNICAL FIELDS SEARCHED (Int.Cl.6) G06F
A	TYSON G ET AL: "CODE SCHEDULING FOR MULTIPLE INSTRUCTION STREAM ARCHITECTURES" INTERNATIONAL JOURNAL OF PARALLEL PROGRAMMING, PLENUM PRESS, NEW YORK, US, vol. 22, no. 3, 1 June 1994 (1994-06-01), pages 243-272, XP000458308 ISSN: 0885-7458 * the whole document * -----	1, 19, 29, 31-33	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 12 November 2001	Examiner Wiltink, J
<p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document</p> <p>T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ..... &amp; : member of the same patent family, corresponding document</p>			

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on  
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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82